

CITY OF HAYWARD

AGENDA REPORT

AGENDA DATE 11/20/01

AGENDA ITEM 5

WORK SESSION ITEM _____

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Authorization for the City Manager to Execute Construction and Maintenance Agreements for the SMART Corridors Project

RECOMMENDATION:

It is recommended that the City Council adopt the attached resolution authorizing the City Manager to execute the construction and maintenance agreements associated with implementation of the I-880 SMART Corridors Project.

DISCUSSION OR BACKGROUND:

On October 9, 2001, Council authorized the City Manager to execute the Memorandum of Understanding (MOU) with the Alameda County Congestion Management Agency (CMA) for the SMART Corridors project. A copy of the October 9, 2001, agenda report is attached for information (see Exhibit A).

At that time, it was noted that two other agreements needed to be executed, as well:

- *Cooperative Agreement for Ownership, Operation, and Maintenance of SMART Corridors.*
This agreement outlines the responsibilities for operation, maintenance, and ownership of the specific equipment that will be installed in each jurisdiction.
- *SMART Corridors Cooperative Agreement for Design, Construction, and Administration.*
This agreement identifies the process and responsibilities for constructing the various components of the SMART Corridors System.

Staff indicated that it would return to Council with a recommendation on the other two agreements, when the details of the SMART Corridors Project were better defined. Staff has received the design plans and additional information from Kimley-Horn, the CMA's consultant.

A discussion of the proposed SMART Corridors components was included in the October 9 Agenda Report. Since the October 9 Council meeting, staff has been successful in adding two additional locations to the project for emergency vehicle preemption – "A" Street at Victory Drive and "A" Street at Royal Avenue.

The SMART Corridors Project will provide additional traffic data and will install additional emergency vehicle preemption units at several locations. Staff feels that the information will be useful to the City in its transportation planning activities and has the potential of providing useful information to the general public regarding traffic conditions. In addition, the emergency vehicle preemption units will assist the Fire Department with its response time requirement.

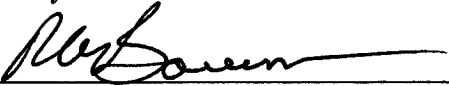
As noted in the October 9 Agenda Report, the SMART Corridors Project also proposes one Trailblazer and two Dynamic Message signs. The Dynamic Message signs would be 4'x7' mounted on large poles eight feet over the sidewalk areas. The Trailblazer sign would be smaller (3½'x3½') and also mounted on a pole in the sidewalk area. These signs could provide travel time and general traffic information to the public. However, staff has some concerns with the overall appearance of the signs and whether there will be any true benefit to the public, as the proposed messages to be displayed have not been determined. Additionally, there are concerns about the visual impact of the signs. The City of Berkeley expressed similar concerns and requested that the signs be dropped from its City's portion of the project until the benefit of the signs can be better evaluated. City staff feels that the same recommendation is appropriate for Hayward.

One significant issue for Council to consider is the City's participation in the project if federal and state funds are not available for ongoing maintenance and operation of the components. Upon completion of installation, the SMART Corridors components within the City will belong to the City. CMA staff estimates there is sufficient funding available to provide operation and maintenance for the first two years of the project, and intends to pursue continued grant funding for ongoing operation and maintenance. However, if the CMA is not successful, responsibility for operation and maintenance will fall to the City. At the request of various cities, the SMART Corridors ownership, operation, and maintenance agreement provides the City the option of withdrawing from the agreement if funding is lost. Given this provision, staff recommends that the City participate in the project.

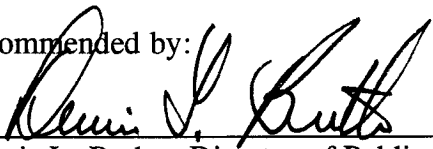
In conclusion, staff recommends approval of the subject agreements with deletion of the Dynamic Message and Trailblazer signs from the City's portion of the project.

Copies of the agreements are available for review in the office of the City Clerk. Upon receiving approval from each of the agencies involved, the CMA expects to advertise this project in December.

Prepared by:


Robert A. Bauman, Deputy Director of Public Works

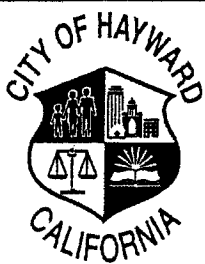
Recommended by:


Dennis L. Butler, Director of Public Works

Approved by:


Jesús Armas, City Manager

Attachments: Exhibit A: October 9, 2001 Agenda Report



CITY OF HAYWARD
AGENDA REPORT

AGENDA DATE 10/09/01

AGENDA ITEM 4

WORK SESSION ITEM _____

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Authorization for the City Manager to Execute the Memorandum of Understanding among Participating Agencies for the SMART Corridors Project

RECOMMENDATION:

It is recommended that the City Council adopt a resolution authorizing the City Manager to execute the Memorandum of Understanding among participating agencies for the I-880 SMART Corridors Project.

DISCUSSION:

The SMART Corridors program is a cooperative effort by the Alameda County Congestion Management Agency (CMA), the Contra Costa County Transportation Authority (CCTA), and twenty-four other agencies, such as cities, counties, and transit operators, to plan and implement a multi-modal advanced transportation-management system along the I-880 corridor, which includes International Boulevard, East 14th Street, San Leandro Boulevard, Hesperian Boulevard, Union City Boulevard, and the San Pablo Avenue (I-80) corridor.

The City of Hayward has been actively participating in this project. The City is a member of the I-880 Steering Committee that has been involved in projects such as the I-880 ramp metering project and the I-880 strategic plan, both of which were previously supported by the City. Council member Hilson represents the City on the Steering Committee. The SMART Corridors project is another effort to improve traffic conditions on I-880, which is the major north-south corridor in Alameda County.

One of the critical issues in our City is the issue of additional traffic on Hesperian Boulevard when there is an incident on I-880. It is recognized that I-880 traffic often uses Hesperian Boulevard as an alternative in such cases. The SMART Corridor project is not intended to encourage detouring traffic onto Hesperian Boulevard. However, implementation of the SMART Corridors project will help to ensure that the through traffic spends as little time as possible on Hayward city streets and, therefore, can reduce the impact.

Additionally, since much of the traffic impacts on the City are regional in nature, it is helpful to have a regional approach to addressing some of these concerns. Neighboring jurisdictions, including the cities of San Leandro and Union City, and Alameda County, have also been participating. Moreover, our participation allows us to ensure that we have a role in the decision-making. While the regional approach is important, the ultimate goal is to ensure that any decision that is made is done with the interests of the City in mind.

Exhibit A

The project goal is to allow the participating agencies to better manage congestion and incidents along regional routes, to improve transportation mobility, efficiency, and safety, and to provide timely and multi-modal transportation information to local elected officials, staff and the public.

SMART Corridors use a variety of technologies to improve transportation systems' performance by promoting the efficient use of existing highway and transit systems. Kimley-Horn, who has been retained by the CMA to plan, design, and implement the SMART Corridors program, has evaluated several types of field devices that employ several different technologies. Kimley-Horn also evaluated and recommended potential locations for such devices (see Exhibit A).

The SMART Corridors technologies discussed below are recommended for the City of Hayward. Note that these are consultant recommendations only. The City of Hayward has the final say regarding which field devices will be located within the City and where such devices will be located.

Installation of eight (8) vehicle detection system (VDS) units at various mid-block locations. These units can measure volumes, speeds, and levels of congestion and provide the City with updated traffic data. The recommended technology is a microwave sensor that can be attached to streetlight poles or other structures. These units can provide the City with additional traffic data that is often needed for field investigations or traffic studies. One specific need is ongoing traffic counts. The VDS units can increase the City's capability to collect this information.

Installation of six (6) closed-circuit television cameras at various intersections to assist in visually confirming incidents and their impact. One drawback to this technology is that unless the camera can be monitored on a regular basis, it will prove ineffective. Even though staff is not generally available to monitor the cameras on a regular basis, the cameras do offer the capability to visually observe incidents.

Installation of dynamic message signs at two (2) locations to provide advisory information about I-880 incidents, special routings, and construction, so drivers may seek alternate routes. The plan recommends that these signs be placed on northbound Hesperian Boulevard north of Tennyson Road, and on southbound Hesperian Boulevard north of Winton Avenue. In the event of a major incident on I-880, traffic may be diverted off I-880 onto Hesperian Boulevard, which is the major north-south alternative to I-880. Therefore, the message signs will be available to assist in re-routing traffic from Hesperian Boulevard back onto I-880, as soon as possible.

Installation of one trailblazer sign with the route number and an arrow that will be used to direct drivers back onto I-880 from Hesperian Boulevard once past an incident. A trailblazer sign is an LED sign that is permanently placed and is activated through cellular or telephone modems. The plan recommends that this sign be placed on southbound Hesperian Boulevard north of Tennyson Road. As is the case with the dynamic message signs, the trailblazer sign will help to re-route traffic from Hesperian Boulevard back onto I-880, as soon as possible.

The appropriateness and location of the dynamic message and trailblazer signs will need to be further evaluated during the design stage of the project.

Emergency Vehicle Preemption. Four (4) existing traffic signals would be equipped with emergency vehicle preemption. This would complement the City's existing preemption program and install additional devices on the Fire Department's primary response routes.

Installation of an on-site Traffic Management System. A system has already been installed at City Hall, but is not yet operative, since the CMA still needs to input the appropriate data. The data from this system is designed to allow staff to observe traffic situations in 'real time' at targeted intersections within the I-880 corridor. Additionally, this system will help staff to keep an updated inventory of traffic signals in the corridor.

Before the project can proceed to implementation, each participating agency must approve three related agreements.

- *Memorandum of Understanding (MOU) among participating agencies for the I-880 Corridor.* The purpose of this MOU is to acknowledge agreement among participating agencies to work cooperatively to improve management and operation of the parallel arterials along the I-880 corridor. Specific roles and responsibilities are outlined. This is the only agreement before Council for action at this time. A copy of this agreement is available for review in the office of the City Clerk.

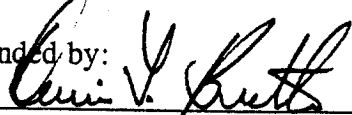
Two other agreements will also be required prior to implementation of the project. These agreements will be brought back to Council for consideration after the details of the SMART Corridor Project are better defined.

- *SMART Corridors Cooperative Agreement for Design, Construction, and Administration.* This agreement identifies the process and responsibilities for constructing the various components of the SMART Corridors System. The agreement must be approved by each participating jurisdiction before construction can commence.
- *SMART Corridors Cooperative Agreement for Ownership, Operation, and Maintenance.* This agreement outlines the responsibilities for operation, maintenance, and ownership of the specific equipment that will be installed in each jurisdiction.

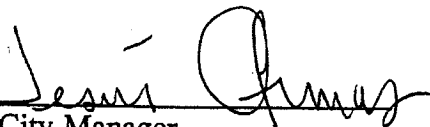
Prepared by:


Robert A. Bauman, Deputy Director of Public Works

Recommended by:


Dennis L. Butler, Director of Public Works

Approved by:


Jesús Armas, City Manager

Exhibits A: List and Map of Proposed Project Features

Recommended Locations of SMART Corridor Field Devices

Vehicle Detection System locations

Hesperian Boulevard between Industrial Parkway West and Panama Avenue
Hesperian Boulevard north of SR 92
Hesperian Boulevard between La Playa and Southland Drive
Hesperian Boulevard north of Winton Avenue
Hesperian Boulevard north of "A" Street
Industrial Boulevard west of SB I-880 ramps
Tennyson Road west of SB I-880 ramps
Winton Avenue west of SB I-880 ramps

Note: all locations will be mid-block locations

Closed Circuit Television (CCTV) Cameras

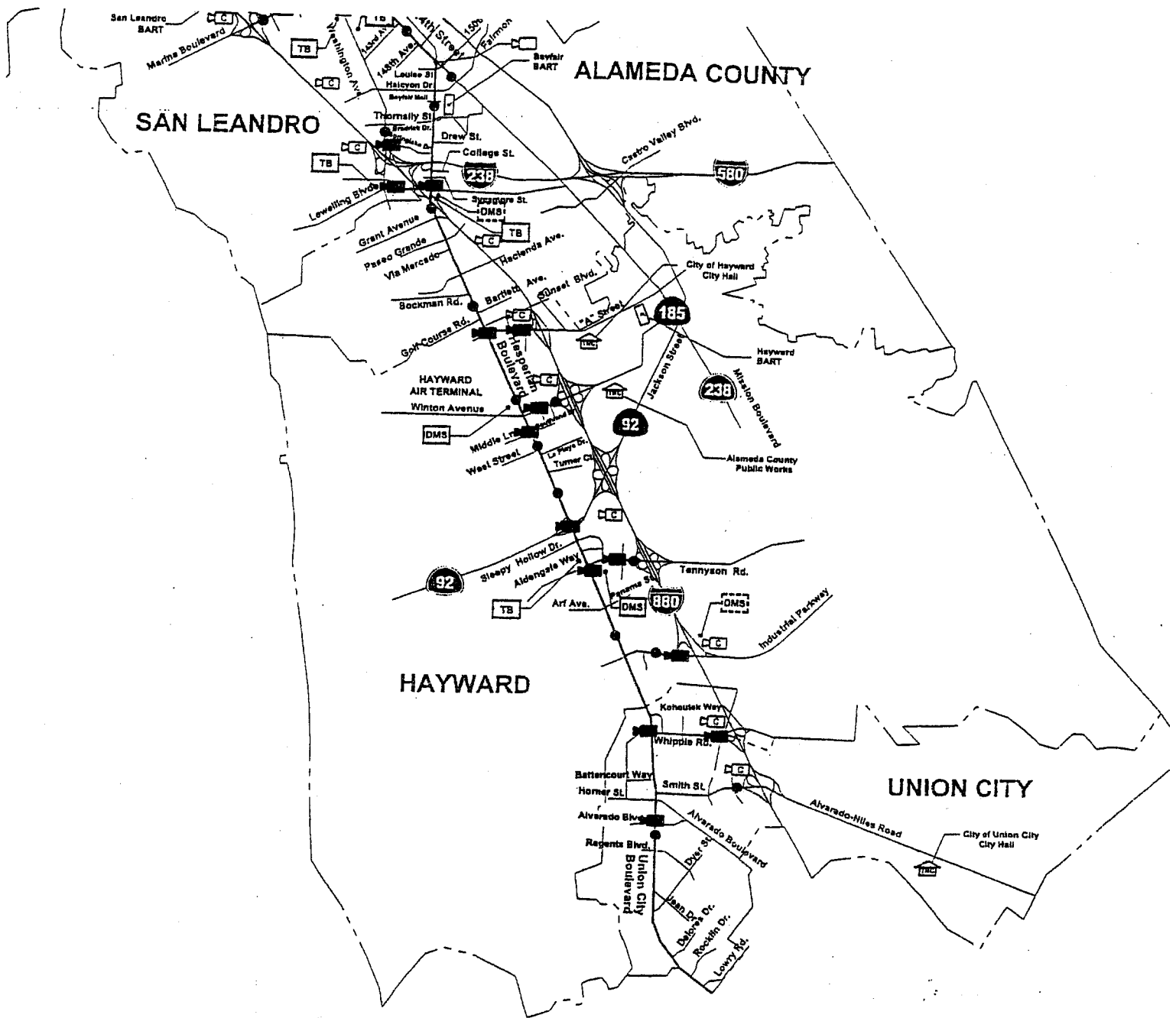
Hesperian Boulevard at Tennyson Road
Hesperian Boulevard at SR 92 ramps
Hesperian Boulevard at Southland Drive
Hesperian Boulevard at "A" Street
Tennyson Road at Calaroga Avenue
Winton Avenue at Southland Drive

Note: CCTV cameras are also proposed for "A" Street/I-880 SB Ramps and Industrial Parkway/I-880 SB Ramps but these will be maintained by Caltrans.










Emergency Vehicle Pre-emption (Opticom)s

Hesperian Boulevard at Sleepy Hollow
Hesperian Boulevard at Tennyson Road
Hesperian Boulevard at Panama/Arf
Hesperian Boulevard at SR 92

Note: Potential future locations could include those on "A" Street between I-880 and Royal Avenue but are not being proposed at this time.



LEGEND

-  Transportation Management Center
-  BART Station
-  Existing Caltrans CCTV Camera
-  Existing CCTV Camera
-  New CCTV Camera
-  Existing Dynamic Message Sign
-  New Dynamic Message Sign
-  New Trailblazer Sign
-  Vehicle Detection System

DRAFT

HAYWARD CITY COUNCIL

RESOLUTION NO. _____

Introduced by Council Member _____

RESOLUTION AUTHORIZING THE CITY MANAGER
TO NEGOTIATE AND EXECUTE ALL NECESSARY
CONSTRUCTION AND MAINTENANCE AGREEMENTS
BETWEEN THE CITY OF HAYWARD AND ALAMEDA
COUNTY CONGESTION MANAGEMENT AGENCY
FOR THE SMART CORRIDORS PROJECT

WHEREAS, on October 9, 2001, the City Council of the City of Hayward authorized the City Manager to execute the Memorandum of Understanding with the Alameda County Congestion Management Agency for the SMART Corridors Project; and

WHEREAS, in addition to the Memorandum of Understanding two other agreements need to be executed: (1) Cooperative Agreement for Ownership, Operation, and Maintenance of SMART Corridors; and (2) SMART Corridors Cooperative Agreement for Design, Construction and Administration.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Hayward that the City Manager is hereby authorized and directed to negotiate and execute on behalf of the City of Hayward the Cooperative Agreement for Ownership, Operation and Maintenance of SMART Corridors, and the SMART Corridors Cooperative Agreement for Design, Construction and Administration with Alameda County Congestion Management Agency for the SMART Corridors Project, in a form to be approved by the City Attorney.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2001

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:

MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward